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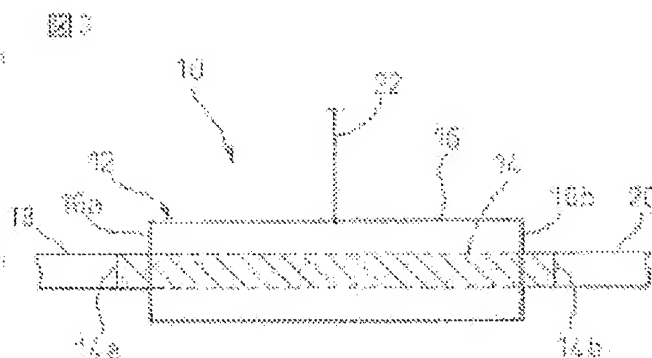
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SEMICONDUCTOR DEVICE CONSISTING OF CYLINDRICAL MULTILAYER STRUCTURE

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 Inventor(s): AWANO YUJI +
 Applicant(s): FUJITSU LTD. +
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Abstract of JP 2003086796 (A)

PROBLEM TO BE SOLVED: To provide a semiconductor device which effectively suppresses a short channel effect in high speed operation, high frequency operation and large current driving, etc. are made possible. SOLUTION: Related to a cylindrical multilayer structure 10 consisting of carbon element, an inner cylindrical body 14 has a semiconductor behavior, and an outer cylindrical body 16 has a metallic behavior. A semiconductor device 10 comprises the multilayer structure 12, and the electric conductivity of the inner cylindrical body 14 of the multilayer structure 12 is controlled by the voltage applied to the outer cylindrical body 16. For that purpose, conductors 18 and 20 connected to the parts of the inner cylindrical body 14, opposite to each other, with the outer cylindrical body 16 in-between, and a means 22 for applying voltage to the outer cylindrical body 16, are provided.



10→炭素多層構造
 12→半導体層のシリコン層
 14→内層シリコン層
 16→外層シリコン層
 18, 20→導電体
 22→電圧印加手段

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